

From: [McKenna, Jim](#)
To: [Chip Humphrey/R10/USEPA/US@EPA](#)
Cc: [Jennifer Woronets](#); [Rick Applegate](#); [Bob Wyatt](#)
Subject: RE: PCB modeling
Date: 04/02/2010 08:37 AM

Thanks Chip, we will pass this along to our technical team. Jim.

-----Original Message-----

From: Humphrey.Chip@epamail.epa.gov
[mailto:Humphrey.Chip@epamail.epa.gov]
Sent: Thursday, April 01, 2010 5:48 PM
To: McKenna, Jim
Cc: Jennifer Woronets; Rick Applegate; Bob Wyatt
Subject: PCB modeling

Jim

This email responds to the LWG's presentation at our meeting on March 11, 2010. During this meeting the LWG presented their approach for developing a PCB Aroclor-homolog relationship. Based on the presentation, EPA supports moving forward with the proposed modeling of PCB homologs based on the PCB Aroclor-homolog relationship. However, EPA would like to offer the following cautions:

1) It is important that the total PCBs estimated by summing the five homolog groups neither substantially under nor over estimate the total PCB concentration as measured by total PCB Aroclors. One approach that should be considered use the regression to predict the fraction of each homolog in a sample rather than the homolog concentration in each sample.

2) It is unclear to what degree modeling five separate homolog groups rather than total PCBs using a single Kow will improve overall model performance. Any improvement should be balanced against the increased complexity of running the fate and transport model five times (for each homolog group) vs. one time (for total PCBs).

Overall, EPA supports the modeling of PCB homologs based on the PCB Aroclor-homolog relationship as long as the total PCB concentration as measured by summing the homolog groups does not impart significant error and the LWG recognizes the increased computational effort involved in running the model on a homolog group basis.

Please let us know if you have any questions.

Chip Humphrey
EPA